

1. A method for preventing or inhibiting axonal degeneration in the central nervous system or peripheral nervous system comprising administering to a human in need thereof:

- to ameliorate the effects of injury or disease.

- (a) non-recombinant, NS-specific antiself activated T-cells;
- (b) a NS-specific antigen;
- (c) a peptide derived from a NS-specific antigen;
- (d) a nucleotide sequence encoding a NS-specific antigen;
- (e) a nucleotide sequence encoding a peptide derived from a NS-specific antigen; or
- (f) any combination of (a) - (e),

to ameliorate the effects of injury or disease.

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surgery.

4. The method of claim 1 or 2 in which said disease is Diabetic neuropathy, senile dementia, Alzheimer's disease, 5 Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, non-arteritic optic neuropathy, or vitamin deficiency.

5. The method of claim 1 or 2 in which said disease 10 is not an autoimmune disease or a neoplasm.

6. The method of claim 1 or 2 in which said peptide derived from a NS-specific antigen is an immunogenic epitope or a cryptic epitope.

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7. The method according to claims 1 or 2 in which said NS-specific antigen is administered intravenously, intraperitoneally, intramuscularly, subcutaneously, orally, intranasally, vaginally, rectally, intraocularly, intrathecally, 20 intradermally, or buccally.

8. The method according to claim 1(a), 1(c), 1(d), 1(e), 2(a), 2(c), 2(d), or 2(e), further comprising administering to a human in need thereof a NS-specific antigen.

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9. The method according to claim 8 in which said NS-specific antigen is administered before or after administration of the composition according to claim 1(a), 1(c), 1(d), 1(e), 2(a), 2(c) or 2(e).

10. The method according to claim 8 in which said NS-specific antigen is administered concurrently with

administration of the composition according to claim 1(a), 1(c),
1(d), 1(e), 2(a), 2(c) or 2(e).

B 11. The method according to claim ¹⁴~~1~~ or ~~2~~ in which
5 said T-cells are attenuated.

B 12. The method according to claim ¹⁴~~1~~ or ~~2~~ in which
said T-cells are autologous or allogeneic.

B 10 13. The method according to claim ¹⁴~~1~~ or ~~2~~ in which the
NS-specific antigen or peptide derived therefrom is myelin basic
protein, myelin oligodendrocyte glycoprotein, proteolipid
protein, myelin-associated glycoprotein, S-100, β -amyloid, Thy-
1, P0, or P2.

15 14. The method according to claim 1d or 2d in which
the nucleotide sequence is depicted in Fig. 9, Fig. 10, Fig.
11(A-F), Fig. 12, Fig. 13, or Fig. 14.

20 15. The method according to claim 1 or 2 in which the
NS-specific antigen comprises the amino acid sequence of Fig.
15, Fig. 16, or Fig. 17.

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add B₁ 7
add B₃

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